

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/924,115	08/08/2001	Travis L. Allan	A-7519.SMP/cat 9973			
20741 7	7590 03/12/2003					
	HOFFMAN WASSON & GITLER			EXAMINER		
SUITE 522	SON DAVIS HIGHWAY	Y	TUCKER,	ER, PHILIP C		
ARLINGTON	, VA 22202		ART UNIT	PAPER NUMBER		
			1712	-		
			DATE MAILED: 03/12/2003	i		
				P		

Please find below and/or attached an Office communication concerning this application or proceeding.

Examiner on the cover s EXPIRE 6(a). In no event, within the statuto pire SIX (6) MON cause the applica	sheet ber however, the control of t	MONTH(S may a reply be n of thirty (30) the mailing date come ABANDO	Group Art Unit 1712 orrespondence FROM THE M timely filed after S days will be considered files of this communic ONED (35 U.S.C. §	e address— AILING DATE BIX (6) MONTHS dered timely. ation . 133).
Examiner on the cover s EXPIRE 6(a). In no event, within the statuto pire SIX (6) MON cause the applica	sheet ber however, the control of t	MONTH(S may a reply be n of thirty (30) the mailing date come ABANDO	Group Art Unit 1712 Orrespondence FROM THE M Timely filed after S days will be considered files of this communic ONED (35 U.S.C. § The merits is compending in the a	e address— AILING DATE BIX (6) MONTHS dered timely. ation . 133).
EXPIRE	however, in the property minimum. THS from the patient to be considered by the property of the	MONTH(S may a reply be n of thirty (30) the mailing date come ABANDO	FROM THE Me timely filed after Stays will be considered files of this communication (35 U.S.C. §	AILING DATE SIX (6) MONTHS dered timely. cation . 133).
EXPIRE	, however, roory minimum THS from to ation to bed s, prosect	_MONTH(S may a reply be n of thirty (30) he mailing dat come ABANDO	the merits is c	AILING DATE SIX (6) MONTHS dered timely. cation . 133).
6(a). In no event, within the statuto pire SIX (6) MON cause the application of the statuto of t	s, prosection, property of the control of the contr	may a reply be n of thirty (30) he mailing dat come ABANDO	days will be considered of this communication (35 U.S.C. §	SIX (6) MONTHS dered timely. eation . 133).
6(a). In no event, within the statuto pire SIX (6) MON cause the application of the statuto of t	s, prosection, property of the control of the contr	may a reply be n of thirty (30) he mailing dat come ABANDO	days will be considered of this communication (35 U.S.C. §	SIX (6) MONTHS dered timely. eation . 133).
within the statuto pire SIX (6) MON' cause the applica formal matters	ory minimum THS from to ation to bed s, prosect J.G. 213.	n of thirty (30) the mailing date come ABANDO cution as to	days will be considered of this communication (35 U.S.C. §	dered timely. cation . 133). closed in
formal matters C.D. 1 1; 453 O	s, prosec 9.G. 213.	cution as to	the merits is c	closed in pplication.
formal matters C.D. 1 1; 453 O	s, prosec 9.G. 213.	cution as to	the merits is c	closed in pplication.
formal matters C.D. 1 1; 453 O	s, prosec 9.G. 213.	cution as to	the merits is c	closed in pplication.
C.D. 1 1; 453 O).G. 213.	is/are p	pending in the a	pplication.
		is/are a	allowed.	
		is/are r	rejected.	
		are sub	bject to restriction	on or election
	/	require	ement.	
eview, PTO-94	48.			
is 🗆 appı	roved 🗆	disapprove	d.	
to by the Exar	miner.			
priority docum	nents have	e been		
			•	
5	∏inte	erview Sumn	nary, PTO-413	
,			•	cation, PTO-15
	eview, PTO-9 is	eview, PTO-948. is approved to by the Examiner. r 35 U.S.C. § 11 9(a)-(d priority documents hav ational Bureau (PCT Ru) Inte	is/are is/are is/are are su require eview, PTO-948. is approved disapprove to by the Examiner. r 35 U.S.C. § 11 9(a)-(d). priority documents have been ational Bureau (PCT Rule 1 7.2(a)).	eview, PTO-948. is approved disapproved. to by the Examiner. r 35 U.S.C. § 11 9(a)-(d). priority documents have been ational Bureau (PCT Rule 1 7.2(a)).

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

Part of Paper No. 6

Art Unit: 1712

DETAILED ACTION

Claim Objections

1. Claim 4 and 12 are objected to because of the following informalities: The compound Kcl should be changed to KCl. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4, 5, 12, 13 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of these claims utilize the term "selected from the group including", which implies that there are other compounds which are part of the group, but not listed. Proper Markush terminology such as "selected from the group consisting of" should be used.

Art Unit: 1712

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).
- 5. Claims 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Thomas (5591701).

Thomas teaches a fluid for use in a wellbore which comprises glycinates and betaines within the scope of the present invention, which are used in brines, to which acid is added (see claims, compounds in column 6, column 4, lines 11-18 and Tables II and IV). Applicants intended use as a fracturing fluid does not distinguish over the prior art (In re Pearson 181 USPQ 641).

6. Claims 1-4, 6, 7, 11, 12, 14, 15 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Dahayanake (6482866).

Art Unit: 1712

Dahayanake teaches a viscoelastic surfactant based fluid which comprises a zwitterionic or amphoteric surfactant within the scope of the present invention, and further comprises an organic acid and a salt (see examples, claims and columns 4-6). An alcohol is used to aid the solubilization of the surfactant (column 8, lines 14-19). The fluid is used in fracturing operations (column 2, lines 10-13). The present invention is thus anticipated by Dahayanake.

7. Claims 1, 2, 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Lungwitz (US 2002/0033260 A1).

Lungwitz teaches a fluid which can be used in fracturing operations, which comprises a zwitterionic surfactant within the scope of the present invention, a salt brine, an acid and an organic solvent (see paragraphs 0043 - 0053 and claims).

Applicants foreign priority claim cannot overcome the present rejection, since a certified copy of such document has not been supplied.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

Art Unit: 1712

to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1, 3, 6-11 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahayanake (6482866).

Dahayanake teaches a viscoelastic surfactant based fluid which comprises a zwitterionic or amphoteric surfactant within the scope of the present invention, and further comprises an organic acid and a salt (see examples, claims and columns 4-6). An alcohol is used to aid the solubilization of the surfactant (column 8, lines 14-19). The fluid is used in fracturing operations (column 2, lines 10-13). Dahayanake teaches that the fluid may be foamed with a gas, such as air, nitrogen or carbon dioxide. Dahayanake differs from the present invention in that the specific amount of gas used in the foam is not disclosed. It would however be obvious to one of ordinary skill in the art to vary the amount of gas, in the foam, in order to achieve optimal foam properties for fracturing operations (In re Aller 105 USPQ 233).

10. Claims 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1712

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tucker whose telephone number is (703) 308-0529. The examiner's normal working hours are 7:30am-4:00pm, Monday-Friday. If necessary SPE Robert Dawson may be contacted at 703-308-2340. For inquiries of a general nature call the receptionist at 703-308-0651. The group FAX no. is 703-872-9310. The **after final** fax no. Is 703-872-9311.

PCT-2753 March 7, 2003

PHILIP C. TUCKER ART UNIT 1712